

AMENDMENTS TO THE CLAIMS

CLAIMS

1. (Original) Injection device for molding of plastic objects, comprising
 - a hollow die (13) provided with a recess (16) and one or more injection holes (6) for plastic in an area of said recess,
 - an elongated body (2), positioned inside the recess (16), provided at one end with one or more heating tips, each heating tip being combined with at least one outflow orifice (14) for plastic and with a respective injection hole (6) for plastic, the elongated body (2) forming, with an internal wall of said recess (16) and a centering ring nut (3), a ring-shaped air space (50, 51) in said recess (16),
 - a tube (1) fitted around said one or more tips near to the injection hole, wherein said tube (1) ~~has~~having an open end (17) nearest the injection hole (6), ~~characterized in that said tube (1) and~~ is not in contact with said internal wall, ~~and in that~~wherein said open end (17) forms together with the walls (16) of the recess a narrow section (51)
 - and wherein ~~in that~~ said tube (1) surrounds the at least one outflow orifice (14) at a distance such as to leave a space for outflow of the plastic, whereby the flow of plastic coming out of said at least one outflow orifice (14) is contained and guided towards said at least one injection hole,
 - whereby said narrow section separates a first a portion (51) of the air space distal from said injection hole, from a second portion (50) of the air space proximal to said injection hole (6), the area of said narrow section (52) being substantially smaller than the respective areas of the sections of said proximal and distal air spaces~~areas~~.
2. (Original) Device according to claim 1 ~~or 2~~, wherein said open end (7) of the tube (1) has one of the following shapes: substantially cylindrical, bent towards the central longitudinal axis of the at least one tip, bent towards the outside of the tip.
3. (Original) Device according to ~~one or more claims from 1 to 3~~, wherein ~~in which~~ the tube (1) is adapted to heat the plastic in the distal area (51) of the distal air space less than in the ~~proximal~~ area (50) of the proximal air space.
4. (Original) Device according to claim ~~3~~4, wherein the tube has a substantially lower thermal conductivity than the elongated body (2).

Int. Appl. No. : **PCT/EP2005/051385**
Filed : **March 24, 2005**

5. (New) Device according to claim 2, wherein the tube is adapted to heat the plastic in the area of the distal air space less than in the area of the proximal air space.

6. (New) Device according to claim 5, wherein the tube has a substantially lower thermal conductivity than the elongated body.